

ABSTRACT

5 The present invention has an object to provide a
manufacturing method of a long large-diameter composite
cemented carbide roll and a hot rolling method of steel using
the same. The roll manufacturing method covers a composite
cemented carbide roll formed by engaging with, and fixing to,
a steel arbor, a sleeve comprising an outer layer made of a
cemented carbide formed by integrating a plurality of
10 previously sintered cylindrical formed members and an inner
layer made of a steel material formed on the inner surface of
the outer layer. The sleeve has a sectional area ratio S_o/S_i
of the sectional area S_o of the outer layer and the sectional
area S_i of the inner layer in a cross-section perpendicular
15 to the rotation axis within a range of from 0.3 to 20. The
sleeve has a length within a range of from 520 to 6,000 mm.
When hot-rolling steel, the cemented carbide rolls of the
invention are used as work rolls of at least one stand for a
roughing mill and/or a finishing mill.